

SEQLIST

SEQUENCE LISTING

<110> Zhang, Dongxiao
Yu, Guoliang
Pytela, Robert
Couto, Joseph

<120> Humanized Rabbit Antibodies

<130> EPIT-001

<140> filed herewith
<141>

<150> 60/404,117
<151> 2002-08-15

<160> 63

<170> FastSEQ for windows Version 4.0

<210> 1
<211> 84
<212> PRT
<213> Oryctolagus cuniculus

<400> 1
Gln Ser Val Glu Glu Ser Gly Gly Arg Leu Val Thr Pro Gly Thr Pro
1 5 10 15
Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Trp Val Arg
20 25 30
Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Gly Arg Phe Thr Ile Ser
35 40 45
Lys Thr Ser Thr Thr Val Asp Leu Lys Ile Thr Ser Pro Thr Thr Glu
50 55 60
Asp Thr Ala Thr Tyr Phe Cys Ala Arg Trp Gly Thr Gly Thr Leu Val
65 70 75 80
Thr Ile Ser Ser

<210> 2
<211> 86
<212> PRT
<213> Oryctolagus cuniculus

<400> 2
Gln Ser Val Lys Glu Ser Glu Gly Gly Leu Phe Lys Pro Thr Asp Thr
1 5 10 15
Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Trp Val Arg
20 25 30
Gln Ala Pro Gly Asn Gly Leu Glu Trp Ile Gly Arg Ser Thr Ile Thr
35 40 45
Arg Asn Thr Asn Leu Asn Thr Val Thr Leu Lys Met Thr Ser Leu Thr
50 55 60
Ala Ala Asp Thr Ala Thr Tyr Phe Cys Ala Arg Trp Gly Gln Gly Thr
65 70 75 80
Leu Val Thr Val Ser Ser
85

SEQLIST

<210> 3
<211> 85
<212> PRT
<213> Oryctolagus cuniculus

<400> 3
Gln Ser Leu Glu Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Ala Ser
1 5 10 15
Leu Thr Leu Thr Cys Thr Ala Ser Gly Phe Ser Phe Ser Trp Val Arg
20 25 30
Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Ala Arg Phe Thr Ile Ser
35 40 45
Lys Thr Ser Ser Thr Thr Val Thr Leu Gln Met Thr Ser Leu Thr Ala
50 55 60
Ala Asp Thr Ala Thr Tyr Phe Cys Ala Arg Trp Gly Pro Gly Thr Leu
65 70 75 80
Val Thr Val Ser Ser
85

<210> 4
<211> 87
<212> PRT
<213> Homo sapiens

<400> 4
Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
20 25 30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
50 55 60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Trp Gly Arg Gly
65 70 75 80
Thr Leu Val Thr Val Ser Ser
85

<210> 5
<211> 87
<212> PRT
<213> Homo sapiens

<400> 5
Glu Val Gln Leu Val Glu Thr Gly Gly Leu Ile Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Trp Val
20 25 30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
50 55 60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65 70 75 80
Thr Met Val Thr Val Ser Ser
85

<210> 6
<211> 87
<212> PRT

SEQLIST

<213> Homo sapiens

<400> 6

Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Trp Val
20 25 30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
50 55 60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65 70 75 80
Thr Thr Val Thr Val Ser Ser
85

<210> 7

<211> 87

<212> PRT

<213> Mus musculus

<400> 7

Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15
Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Trp Val
20 25 30
Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Leu Gly Arg Leu Ser Ile
35 40 45
Ser Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn Ser Leu
50 55 60
Gln Thr Asp Asp Thr Ala Met Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65 70 75 80
Thr Leu Val Thr Val Ser Ala
85

<210> 8

<211> 87

<212> PRT

<213> Mus musculus

<400> 8

Glu Val Met Leu Val Glu Ser Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15
Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
20 25 30
Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ala Lys Asn Asn Leu Tyr Leu Gln Met Ser Ser Leu
50 55 60
Arg Ser Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg Trp Gly Ala Gly
65 70 75 80
Thr Thr Val Thr Val Ser Ser
85

<210> 9

<211> 87

<212> PRT

<213> Mus musculus

<400> 9

SEQLIST

Glu Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15
Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
20 25 30
Arg Gln Ser Pro Glu Lys Arg Leu Glu Trp Val Ala Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Ser Ser Leu
50 55 60
Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Thr Arg Trp Gly Gln Gly
65 70 75 80
Thr Thr Leu Thr Val Ser Ser
85

<210> 10

<211> 80

<212> PRT

<213> Oryctolagus cuniculus

<400> 10

Ala Tyr Asp Met Thr Gln Thr Pro Ala Ser Val Glu Val Ala Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Arg
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45
Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Gly Val Glu Cys Ala Asp
50 55 60
Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Glu Val Val Val Lys
65 70 75 80

<210> 11

<211> 80

<212> PRT

<213> Oryctolagus cuniculus

<400> 11

Asp Val Val Met Thr Gln Thr Pro Ala Ser Val Ser Glu Pro Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30
Pro Lys Leu Leu Ile Ser Gly Val Ser Ser Arg Phe Lys Ala Ser Arg
35 40 45
Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
50 55 60
Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Val Val Val Glu
65 70 75 80

<210> 12

<211> 80

<212> PRT

<213> Oryctolagus cuniculus

<400> 12

Ala Leu Val Met Thr Gln Thr Pro Ala Ser Val Ser Ala Ala Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Arg
35 40 45
Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Gly Val Gln Arg Glu Asp

SEQLIST

50		55		60											
Ala	Ala	Thr	Tyr	Tyr	Cys	Phe	Gly	Gly	Gly	Thr	Glu	Leu	Glu	Ile	Leu
65					70					75				80	

<210> 13
<211> 80
<212> PRT
<213> Oryctolagus cuniculus

<400> 13
Glu Val Val Met Thr Gln Thr Pro Ala Ser Val Glu Ala Ala Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Arg
20 25 30
Pro Asn Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Arg
35 40 45
Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Gly Val Gln Arg Glu Asp
50 55 60
Ala Ala Thr Tyr Tyr Cys Phe Gly Thr Gly Thr Lys Val Glu Ile Lys
65 70 75 80

<210> 14
<211> 80
<212> PRT
<213> Homo sapiens

<400> 14
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Phe Ala Thr Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
65 70 75 80

<210> 15
<211> 80
<212> PRT
<213> Homo sapiens

<400> 15
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Phe Ala Thr Tyr Tyr Cys Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
65 70 75 80

<210> 16
<211> 80
<212> PRT
<213> Homo sapiens

SEQLIST

<400> 16
Ala Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Phe Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
65 70 75 80

<210> 17
<211> 80
<212> PRT
<213> Mus musculus

<400> 17
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1 5 10 15
Glu Arg Ala Thr Leu Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Ala
20 25 30
Pro Arg Leu Leu Ile Tyr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp
50 55 60
Phe Ala Val Tyr Tyr Cys Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
65 70 75 80

<210> 18
<211> 80
<212> PRT
<213> Mus musculus

<400> 18
Asp Ile Gln Met Asn Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15
Asp Thr Ile Thr Ile Thr Cys Trp Tyr Gln Gln Lys Lys Gly Asn Ile
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Gly Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Ile Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
65 70 75 80

<210> 19
<211> 80
<212> PRT
<213> Mus musculus

<400> 19
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Ala Gly
1 5 10 15
Asp Lys Val Thr Met Ser Cys Trp Tyr Gln Gln Lys Pro Trp Gln Pro
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp

SEQLIST

50 55 60
Leu Ala Val Tyr Tyr Cys Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
65 70 75 80

<210> 20

<211> 80

<212> PRT

<213> Mus musculus

<400> 20

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Glu Thr Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Gln Gly Lys Ser
20 25 30
Pro Gln Leu Leu Val Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Pro Glu Asp
50 55 60
Phe Gly Ser Tyr Tyr Cys Phe Ser Asp Gly Thr Arg Leu Glu Ile Lys
65 70 75 80

<210> 21

<211> 80

<212> PRT

<213> Mus musculus

<400> 21

Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Pro Val Ser Ala Gly
1 5 10 15
Asp Arg Val Thr Met Thr Cys Trp Tyr Gln Gln Lys Pro Gly Gln Ser
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Val Gln Val Glu Asp
50 55 60
Leu Ala Val Tyr Phe Cys Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
65 70 75 80

<210> 22

<211> 79

<212> PRT

<213> Oryctolagus cuniculus

<400> 22

Gln Pro Val Leu Thr Gln Ser Pro Ser Ala Ala Ala Ala Leu Gly Ala
1 5 10 15
Ser Ala Lys Leu Thr Cys Trp Tyr Gln His Gln Lys Gly Glu Ala Pro
20 25 30
Arg Tyr Leu Asp Gly Gly Val Pro Asp Arg Phe Ser Gly Ser Ser Ser
35 40 45
Gly Ala Asp Arg Tyr Leu Ile Ile Ser Ser Val Gln Ala Asp Asp Glu
50 55 60
Ala Asp Tyr Tyr Cys Phe Gly Gly Thr Gln Leu Thr Val Thr
65 70 75

<210> 23

<211> 79

<212> PRT

<213> Oryctolagus cuniculus

SEQLIST

<400> 23
Gln Pro Val Leu Thr Gln Ser Pro Ser Val Ser Ala Ala Leu Gly Ala
1 5 10 15
Ser Ala Arg Leu Thr Cys Trp Tyr Gln Gln Gln Gly Glu Ala Pro
20 25 30
Arg Tyr Leu Asp Gly Gly Val Pro Asp Arg Phe Ser Gly Ser Ser Ser
35 40 45
Gly Ala Asp Arg Tyr Leu Ile Ile Pro Ser Val Gln Ala Asp Asp Glu
50 55 60
Ala Asp Tyr Tyr Cys Phe Gly Gly Thr Gln Leu Thr Val Thr
65 70 75

<210> 24
<211> 79
<212> PRT
<213> Homo sapiens

<400> 24
Gln Pro Val Leu Thr Gln Ser Ser Ser Ala Ser Ala Ser Leu Gly Ser
1 5 10 15
Ser Val Lys Leu Thr Cys Trp His Gln Gln Gln Pro Gly Lys Ala Pro
20 25 30
Arg Tyr Leu Met Lys Gly Val Pro Asp Arg Phe Ser Gly Ser Ser Ser
35 40 45
Gly Ala Asp Arg Tyr Leu Thr Ile Ser Asn Leu Gln Leu Glu Asp Glu
50 55 60
Ala Asp Tyr Tyr Cys Phe Gly Gly Thr Lys Leu Thr Val Leu
65 70 75

<210> 25
<211> 79
<212> PRT
<213> Homo sapiens

<400> 25
Gln Leu Val Leu Thr Gln Ser Pro Ser Ala Ser Ala Ser Leu Gly Ala
1 5 10 15
Ser Val Lys Leu Thr Cys Trp His Gln Gln Gln Pro Glu Lys Gly Pro
20 25 30
Arg Tyr Leu Met Lys Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser
35 40 45
Gly Ala Glu Arg Tyr Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp Glu
50 55 60
Ala Asp Tyr Tyr Cys Phe Gly Thr Gly Thr Lys Val Thr Val Leu
65 70 75

<210> 26
<211> 79
<212> PRT
<213> Mus musculus

<400> 26
Gln Leu Val Leu Thr Gln Ser Ser Ser Ala Ser Phe Ser Leu Gly Ala
1 5 10 15
Ser Ala Lys Leu Thr Cys Trp Tyr Gln Gln Gln Pro Leu Lys Pro Pro
20 25 30
Lys Tyr Val Met Glu Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser
35 40 45
Gly Ala Asp Arg Tyr Leu Ser Ile Ser Asn Ile Gln Pro Glu Asp Glu

SEQLIST

50	Ala Ile Tyr Ile Cys Phe	55	Gly Gly Gly Thr Lys Val	60	Thr Val Leu
65	70	75			
<210> 27					
<211> 15					
<212> PRT					
<213> Homo sapiens					
<400> 27					
1	Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr	5	10	15	
<210> 28					
<211> 24					
<212> DNA					
<213> Artificial Sequence					
<220>					
<223> Oligo primer					
<400> 28					
tcgcactcaa cacagacgct cacc					24
<210> 29					
<211> 24					
<212> DNA					
<213> Artificial Sequence					
<220>					
<223> Oligo primer					
<400> 29					
atggagactg ggctgcgcgt gctt					24
<210> 30					
<211> 25					
<212> DNA					
<213> Artificial Sequence					
<220>					
<223> Oligo primer					
<400> 30					
gctcagcgag tagaggcctg aggac					25
<210> 31					
<211> 25					
<212> DNA					
<213> Artificial Sequence					
<220>					
<223> Oligo primer					
<400> 31					
ttggggggaa gatgaagaca gacgg					25

SEQLIST

<210> 32
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> oligo primer

<400> 32
cagtgcaggc aggacccagc atgg

24

<210> 33
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> oligo primer

<400> 33
gccctggcag gcgtctcrct cta

23

<210> 34
<211> 113
<212> PRT
<213> Oryctolagus cuniculus

<400> 34
Asp Ile Val Met Thr Gln Thr Pro Ser Ser Val Ser Ala Ala Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Gln Ala Ser Asp Asn Ile Tyr Ser Leu
20 25 30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile
35 40 45
Tyr Tyr Thr Ser Asp Leu Thr Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Tyr Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys
65 70 75 80
Ala Asp Ala Ala Thr Tyr Tyr Cys Gln Ser Tyr His Tyr Ser Lys Ser
85 90 95
Ser Thr Tyr Val Asn Val Phe Gly Gly Thr Glu Val Val Val Lys
100 105 110
Gly

<210> 35
<211> 121
<212> PRT
<213> Oryctolagus cuniculus

<400> 35
Gln Ser Leu Glu Glu Ser Gly Gly Leu Val Lys Pro Gly Ala Ser
1 5 10 15
Leu Ala Leu Thr Cys Lys Ala Ser Gly Phe Ser Phe Ser Leu Ser Phe
20 25 30
Tyr Met Cys Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45
Ala Cys Ile Tyr Ser Gly Ser Ser Gly Ser Thr Tyr Ala Ser Trp
50 55 60
Ala Lys Gly Arg Phe Thr Ile Ser Lys Thr Ser Ala Thr Thr Val Thr

SEQLIST

65	70	75	80
Leu Gln Met Thr Thr Leu Thr Ala Ala Asp	Asp Thr Ala Thr Tyr	Phe Cys	
85	90	95	
Ala Arg Ser Ala Ser Ser Thr Thr Phe His	Tyr Phe Asn	Leu Trp Gly	
100	105	110	
Gln Gly Thr Leu Val Thr Val Ser Ser			
115	120		

<210> 36
<211> 87
<212> PRT
<213> Mus musculus

<400> 36
Glu Val Lys Leu Gln Glu Ser Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Lys Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Trp Val
20 25 30
Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Ser Arg Leu
50 55 60
Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65 70 75 80
Thr Thr Val Thr Val Ser Ser
85

<210> 37
<211> 87
<212> PRT
<213> Homo sapiens

<400> 37
Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Trp Val
20 25 30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
50 55 60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65 70 75 80
Thr Leu Val Thr Val Ser Ser
85

<210> 38
<211> 85
<212> PRT
<213> Oryctolagus cuniculus

<400> 38
Gln Ser Leu Glu Glu Ser Gly Gly Leu Val Lys Pro Gly Ala Ser
1 5 10 15
Leu Ala Leu Thr Cys Lys Ala Ser Gly Phe Ser Phe Ser Trp Val Arg
20 25 30
Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Ala Arg Phe Thr Ile Ser
35 40 45
Lys Thr Ser Ala Thr Thr Val Thr Leu Gln Met Thr Thr Leu Thr Ala
50 55 60

SEQLIST
Ala Asp Thr Ala Thr Tyr Phe Cys Ala Arg Trp Gly Gln Gly Thr Leu
65 70 75 80
Val Thr Val Ser Ser
85

<210> 39
<211> 84
<212> PRT
<213> Oryctolagus cuniculus

<400> 39
Gln Ser Val Glu Glu Ser Gly Gly Arg Leu Val Thr Pro Gly Thr Pro
1 5 10 15
Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Trp Val Arg
20 25 30
Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Gly Arg Phe Thr Ile Ser
35 40 45
Lys Thr Ser Thr Thr Val Asp Leu Lys Ile Thr Ser Pro Thr Thr Glu
50 55 60
Asp Thr Ala Thr Tyr Phe Cys Ala Arg Trp Gly Thr Gly Thr Leu Val
65 70 75 80
Thr Ile Ser Ser

<210> 40
<211> 86
<212> PRT
<213> Oryctolagus cuniculus

<400> 40
Gln Ser Val Lys Glu Ser Glu Gly Gly Leu Phe Lys Pro Thr Asp Thr
1 5 10 15
Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Trp Val Arg
20 25 30
Gln Ala Pro Gly Asn Gly Leu Glu Trp Ile Gly Arg Ser Thr Ile Thr
35 40 45
Arg Asn Thr Asn Leu Asn Thr Val Thr Leu Lys Met Thr Ser Leu Thr
50 55 60
Ala Ala Asp Thr Ala Thr Tyr Phe Cys Ala Arg Trp Gly Gln Gly Thr
65 70 75 80
Leu Val Thr Val Ser Ser
85

<210> 41
<211> 85
<212> PRT
<213> Oryctolagus cuniculus

<400> 41
Gln Ser Leu Glu Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Ala Ser
1 5 10 15
Leu Thr Leu Thr Cys Thr Ala Ser Gly Phe Ser Phe Ser Trp Val Arg
20 25 30
Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Ala Arg Phe Thr Ile Ser
35 40 45
Lys Thr Ser Ser Thr Thr Val Thr Leu Gln Met Thr Ser Leu Thr Ala
50 55 60
Ala Asp Thr Ala Thr Tyr Phe Cys Ala Arg Trp Gly Pro Gly Thr Leu
65 70 75 80
Val Thr Val Ser Ser

SEQLIST

85

<210> 42
<211> 87
<212> PRT
<213> Homo sapiens

<400> 42
Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
20 25 30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
50 55 60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Trp Gly Arg Gly
65 70 75 80
Thr Leu Val Thr Val Ser Ser
85

<210> 43
<211> 87
<212> PRT
<213> Homo sapiens

<400> 43
Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Ile Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Trp Val
20 25 30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
50 55 60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65 70 75 80
Thr Met Val Thr Val Ser Ser
85

<210> 44
<211> 87
<212> PRT
<213> Homo sapiens

<400> 44
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Trp Val
20 25 30
Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
50 55 60
Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65 70 75 80
Thr Thr Val Thr Val Ser Ser
85

SEQLIST

<210> 45
<211> 87
<212> PRT
<213> Mus musculus

<400> 45
Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15
Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Trp Val
20 25 30
Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Leu Gly Arg Leu Ser Ile
35 40 45
Ser Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn Ser Leu
50 55 60
Gln Thr Asp Asp Thr Ala Met Tyr Tyr Cys Ala Arg Trp Gly Gln Gly
65 70 75 80
Thr Leu Val Thr Val Ser Ala
85

<210> 46
<211> 87
<212> PRT
<213> Mus musculus

<400> 46
Glu Val Met Leu Val Glu Ser Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15
Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
20 25 30
Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ala Lys Asn Asn Leu Tyr Leu Gln Met Ser Ser Leu
50 55 60
Arg Ser Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg Trp Gly Ala Gly
65 70 75 80
Thr Thr Val Thr Val Ser Ser
85

<210> 47
<211> 87
<212> PRT
<213> Mus musculus

<400> 47
Glu Val Lys Leu Val Glu Ser Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15
Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Trp Val
20 25 30
Arg Gln Ser Pro Glu Lys Arg Leu Glu Trp Val Ala Arg Phe Thr Ile
35 40 45
Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Ser Ser Leu
50 55 60
Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Thr Arg Trp Gly Gln Gly
65 70 75 80
Thr Thr Leu Thr Val Ser Ser
85

<210> 48
<211> 80
<212> PRT

SEQLIST

<213> Mus musculus

<400> 48

Asp Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15
Asp Thr Ile Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Asn Ile
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Gly Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Ile Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
65 70 75 80

<210> 49

<211> 80

<212> PRT

<213> Homo sapiens

<400> 49

Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp
50 55 60
Phe Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
65 70 75 80

<210> 50

<211> 80

<212> PRT

<213> Oryctolagus cuniculus

<400> 50

Asp Ile Val Met Thr Gln Thr Pro Ser Ser Val Ser Ala Ala Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Tyr Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
50 55 60
Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Glu Val Val Val Lys
65 70 75 80

<210> 51

<211> 80

<212> PRT

<213> Oryctolagus cuniculus

<400> 51

Ala Tyr Asp Met Thr Gln Thr Pro Ala Ser Val Glu Val Ala Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Arg
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45

SEQLIST

Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Gly Val Glu Cys Ala Asp
50 55 60
Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Glu Val Val Val Lys
65 70 75 80

<210> 52
<211> 80
<212> PRT
<213> Oryctolagus cuniculus

<400> 52
Asp Val Val Met Thr Gln Thr Pro Ala Ser Val Ser Glu Pro Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30
Pro Lys Leu Leu Ile Ser Gly Val Ser Ser Arg Phe Lys Ala Ser Arg
35 40 45
Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
50 55 60
Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Lys Val Val Val Glu
65 70 75 80

<210> 53
<211> 80
<212> PRT
<213> Oryctolagus cuniculus

<400> 53
Ala Leu Val Met Thr Gln Thr Pro Ala Ser Val Ser Ala Ala Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Arg
35 40 45
Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Gly Val Gln Arg Glu Asp
50 55 60
Ala Ala Thr Tyr Tyr Cys Phe Gly Gly Gly Thr Glu Leu Glu Ile Leu
65 70 75 80

<210> 54
<211> 80
<212> PRT
<213> Oryctolagus cuniculus

<400> 54
Glu Val Val Met Thr Gln Thr Pro Ala Ser Val Glu Ala Ala Val Gly
1 5 10 15
Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Arg
20 25 30
Pro Asn Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Arg
35 40 45
Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Gly Val Gln Arg Glu Asp
50 55 60
Ala Ala Thr Tyr Tyr Cys Phe Gly Thr Gly Thr Lys Val Glu Ile Lys
65 70 75 80

<210> 55
<211> 80
<212> PRT

SEQLIST

<213> Homo sapiens

<400> 55

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Phe Ala Thr Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
65 70 75 80

<210> 56

<211> 80

<212> PRT

<213> Homo sapiens

<400> 56

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Phe Ala Thr Tyr Tyr Cys Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
65 70 75 80

<210> 57

<211> 80

<212> PRT

<213> Homo sapiens

<400> 57

Ala Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Phe Ala Thr Tyr Tyr Cys Phe Gly Gly Thr Lys Val Glu Ile Lys
65 70 75 80

<210> 58

<211> 80

<212> PRT

<213> Homo sapiens

<400> 58

Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1 5 10 15
Glu Arg Ala Thr Leu Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Ala
20 25 30
Pro Arg Leu Leu Ile Tyr Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly
35 40 45

SEQLIST

Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp
50 55 60
Phe Ala Val Tyr Tyr Cys Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
65 70 75 80

<210> 59
<211> 80
<212> PRT
<213> Mus musculus

<400> 59
Asp Ile Gln Met Asn Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15
Asp Thr Ile Thr Ile Thr Cys Trp Tyr Gln Gln Lys Lys Gly Asn Ile
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Gly Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
50 55 60
Ile Ala Thr Tyr Tyr Cys Phe Gly Gly Thr Lys Leu Glu Ile Lys
65 70 75 80

<210> 60
<211> 80
<212> PRT
<213> Mus musculus

<400> 60
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Ala Gly
1 5 10 15
Asp Lys Val Thr Met Ser Cys Trp Tyr Gln Gln Lys Pro Trp Gln Pro
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp
50 55 60
Leu Ala Val Tyr Tyr Cys Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
65 70 75 80

<210> 61
<211> 80
<212> PRT
<213> Mus musculus

<400> 61
Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Glu Thr Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Gln Gly Lys Ser
20 25 30
Pro Gln Leu Leu Val Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45
Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Pro Glu Asp
50 55 60
Phe Gly Ser Tyr Tyr Cys Phe Ser Asp Gly Thr Arg Leu Glu Ile Lys
65 70 75 80

<210> 62
<211> 80
<212> PRT

SEQLIST

<213> Mus musculus

<400> 62
Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Pro Val Ser Ala Gly
1 5 10 15
Asp Arg Val Thr Met Thr Cys Trp Tyr Gln Gln Lys Pro Gly Gln Ser
20 25 30
Pro Lys Leu Leu Ile Tyr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly
35 40 45
Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Val Gln Val Glu Asp
50 55 60
Leu Ala Val Tyr Phe Cys Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
65 70 75 80

<210> 63

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic oligopeptide

<221> VARIANT

<222> 3

<223> Xaa = Any Amino Acid

<400> 63

Gly Gly Xaa Gly Gly
1 5